Vision-RTK 2 Release Notes

Release v2.102.7

MAY, 2025

Table of Contents

1	Overview	.2
2	Release notes	.2
2.1.	Positioning	.2
2.2.	GNSS	.2
2.3.	Web interface	.2
2.4.	Data interface	.2
2.5.	Other	.2
2.6.	Known limitations	.3

1 Overview

This release consists of the following artifact:

Image: fp_vrtk2-release-vr2_2.102.7

At the time of release, the following support documents and code are valid:

- Documentation
 - Release notes (this document): VRTK2_v2.102.7_release notes_v0.pdf
 - Integration manual: VRTK2_integration_manual_v2.3.3.pdf
 - Datasheet: VRTK2_Datasheet_v1.0.pdf
- Support software
 - Fixposition-driver-8.0.2 <u>https://github.com/fixposition/fixposition_driver/tree/8.0.2</u> fixposition_gnss_tf-3.0.1: <u>https://github.com/fixposition/fixposition_gnss_tf/tree/3.0.1</u>
 - o Fixposition SDK: https://github.com/fixposition/fixposition-sdk

For any questions or issues, please contact Fixposition support at support@fixposition.com.

2 Release notes

The changes described here are with respect to the release 2.102.4.

2.1. Positioning

- Improved performance and stability in GNSS degraded conditions.
- Improved covariance estimation in GNSS degraded conditions.

2.2. GNSS

• Improved signal tracking and selection in multipath scenarios.

2.3. Web interface

2.4. Data interface

• Fixed range output in azimuth of NOV_B-INSPVAX message.

2.5. Other

- Improve reliability when saving config changes
- Increase PTP neighborPropDelayThresh for gPTP and automotive PTP to 100'000ns to allow more PTP clients to connect to the VRTK-2 master clock.

2.6. Known limitations

- Upon updating, the priorly saved biases are deleted and users need to converge the IMU (and if enabled wheel odometry) by moving for around 80-100 meters while receiving RTK Fix signals. Only then, it is possible to use the new load position feature. Please note that this process is only necessary at first time use or after factory resets when no IMU bias data is available.
- **Downgrading:** As a precaution downgrading the firmware is not recommended anymore, and if needed, it requires some instructions from us. Contact support@fixposition.com
- As described in our documentation the altitude of the NMEA-GP-GGA refers to the altitude above the respective ellipsoid instead of the orthometric height according to NMEA standard
- Fusion does not detect bad warmstart parameters (after changing config). Reset data on the 'System > Tools' page
- When recording (to external disk) powering off (by cutting power) or unplugging the USB disk too early may lead to data loss in the recording. Use the webinterface or API to download the recordings, unmount the disk or shutdown the sensor in order to prevent the data loss.
- Note: Upgrading to this version from any other version than the last customer release (2.85.3, 2.102.2, 2.102.4, or 2.102.5), namely other "Beta" versions, may require a factory reset. If you see anything funny, do a factory reset!
- Some configuration may be reset automatically after the update. To assure your configuration is not lost, kindly save a backup file of your configuration on the "System > Tools > Backup and Restore" page of the web interface.
- If you would like to downgrade to the previously installed firmware, please reach out to support@fixposition.com for instructions. Not following the recommended use and instructions may cause unexpected behavior or damage.